

# TENTATIVE SCHEDULE (**UPDATED** 1/5/2004)

Week	Lecture Topics	Labs
1	<b>I Introduction</b> <i>course outline and objectives</i> <i>general description of wind waves</i> <b>II Deep Water Theory and Prediction</b> <i>deep water linear wave theory</i>	<b>extra lecture</b> (Wed. 1500-1550)
2	dispersion, kinematics and energetics <i>wave generation</i> historical developments, Phillips' theory	<b>extra lecture</b> (Wed. 1500-1550)
3	Miles' theory, equilibrium spectra laboratory and field data	<b>I Wave Measurement and Analysis</b>
4	<i>nonlinear wave-wave interactions</i> theory, the JONSWAP spectrum <i>whitecapping</i>	<b>II Hurricane Swell Observations</b>
5	<i>swell dispersion</i> <i>numerical prediction</i> spectral energy balance	CLASS PRESENTATIONS (deep water topics)
6	operational modes; global forecasts	<b>extra lecture</b> (Wed. 1500-1550)
7	<b>III Coastal Theory and Prediction</b> <i>uniform depth</i> dispersion relation, phase and group speed	<b>III Numerical Prediction Models</b>
8	<i>varying depth</i> shoaling and refraction ray tracing and spectral transformation <i>regional models</i>	<b>IV Wind Seas in a Coastal Region</b>
9	<i>surf prediction</i> breaking criteria, energy dissipation surf prediction models	CLASS PRESENTATIONS (shallow water topics)
10	<b>no lectures</b>	<b>V Monterey Bay Cruises</b>
11	<b>no lectures</b>	<b>VI Cruise Data Analysis</b>